

36. (Newly Added) The electrical connector system as recited in claim 18, wherein said flexible circuit comprises a flexible cable.

37. (Newly Added) The electrical connector system as recited in claim 18, wherein said flexible circuit comprises a ribbon cable.

38. (Newly Added) The electrical connector system as recited in claim 16, wherein said transition board comprises a plurality of holes and a plurality of corresponding connection points.

39. (Newly Added) The electrical connector system as recited in claims 38, wherein said temperature sensor comprises a plurality of wires and each of said wires is disposed in one of said plurality of holes.

REMARKS

Claim Status

Claims 1-19 and 26-33 stand rejected and claims 20-25 stand withdrawn from further consideration. Applicant maintains the patentability of claims 1-33.

Claims 1-7, 9-13, 16-17, and 26-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,102,708 to Kimura, hereinafter “Kimura,” in view of U.S. Patent No. 6,102,708 to Behl, hereinafter “Behl.” Claims 8, 14-15, and 18-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kimura in view of Behl and U.S. Patent No. 4,915,639 to Cohn et al., hereinafter “Cohn.” It is respectfully submitted that claims 1-19 and 26-33 are allowable over the cited references for the reasons set forth below. Claims 34-39 have been newly added.

Rejections

Independent Claims 1, 9, 16, 32, and 33

Claims 1, 9, 16, 32, and 33 are directed to an electrical connector that can receive a mating connector. Further, a temperature sensor on the electrical connector is positioned to detect a temperature of the mating connector. In this manner, the temperature of the mating connector is detected when the mating connector is inserted in the electrical connector, while still allowing removal of the mating connector from the electrical connector.

The cited references, either taken alone or in combination, do not disclose or suggest all of the features of the invention as recited by the claims, as represented by claim 1 which recites a “*an electrical connector adapted to receive a mating connector*” and “*a temperature sensor on said electrical connector positioned to detect a surface temperature of the mating connector when said mating connector is received in said electrical connector, said temperature sensor positioned to allow insertion and removal of said mating connector to and from said electrical connector.*” (emphasis added)

Kimura discloses a card connector for receiving a card but does not disclose a temperature sensor. The examiner concedes that Kimura lacks the claimed temperature sensor for detection of the temperature of the mating connector and therefore seeks to rely on Behl.

Behl discloses a card 500 including a heat sensor 517 that is attached near a connector 510. Connector 510 is a part of card 500. (Behl at col. 5, lines 59-63). The examiner reads card 500 of Behl to be the electrical connector of the present claims and connector 510 to be the mating connector of present claims. (Office action page 3, lines 3-6). The claims do not read on this interpretation of Behl. For example, the claims recite the feature of “*an electrical connector adapted to receive a mating connector.*” In Behl, card 500 is *not* adapted to receive connector 510. Rather, connector 510 is an integral part of card 500. Therefore, Behl does not disclose or suggest *an electrical connector adapted to receive a mating connector*, as recited by the claims.

The examiner further states that it would have been obvious, in view of Behl, to modify the electrical connector system of Kimura by including a temperature sensor positioned to directly detect a temperature of a mating connector. Behl, however, simply

senses the temperature of one component of a card using a temperature sensor mounted on *the same card*. In more detail, Behl discloses a card 500 including a heat sensor 517. Heat sensor 517 is part of card 500 and heat sensor 517 is located near connector 510, which is also a part of card 500. Therefore, Behl discloses a card having a heat sensor that senses the temperature of a connector, which is a part of the same card. This is in contrast to the claims which recite the feature of a *temperature sensor on an electrical connector* positioned to *detect a temperature of the mating connector*. Assuming arguendo that there is some motivation to combine the cited references, applying Behl to the system of Kimura would at best result in a card having a temperature sensor that senses the temperature of a card component, not a temperature sensor mounted on an electrical connector to detect a temperature of the mating connector, as recited by the claims.

Therefore, neither of the cited references disclose or suggest the features of independent claims 1, 9, 16, 32 or 33 or any claims depending therefrom including claims 2-8, 10-15, 16-19 and 26-31 and therefore they are also patentable, at least by reason of their dependency. Moreover, the combination of the cited references (assuming arguendo that such combination is suggested) does not disclose or suggest the features of the independent claims (or any claims depending therefrom). Thus, claims 1-19 and 26-33 are patentable over the cited references and applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-19 and 26-33 under 35 U.S.C. § 103(a).

Dependent Claim 4

Claim 4 recites a *temperature sensor extending into an aperture*. Neither Kimura nor Behl disclose or suggest a temperature sensor extending into an aperture. Kimura discloses an aperture, but does not disclose or suggest a temperature sensor extending into the aperture. Behl discloses a temperature sensor but does not disclose a temperature sensor extending into an aperture. The temperature sensor in Behl is simply attached near a connector. The temperature sensor of Behl does not extend into an aperture. Therefore, neither Kimura or

Behl disclose or suggest a temperature sensor extending into an aperture, as recited by the claim.

The examiner refers only to Kimura in rejecting claim 4, however, the examiner has noted in the office action that Kimura does not disclose a temperature sensor (office action at page 2, line 19). Therefore, Kimura cannot by itself disclose or suggest a temperature sensor extending into an aperture, as recited by the claim. Further, the examiner has not yet made a *prima facie* case that Behl discloses or suggests a temperature sensor extending into an aperture, nor does Behl disclose or suggest a temperature sensor extending into an aperture, as recited by the claim.

Therefore, neither of the cited references disclose or suggest the features of dependent claim 4. Further, the combination of the cited references (assuming arguendo that such combination is suggested) does not disclose or suggest the features of claim 4. Thus, claim 4 is patentable over the cited references for the reasons set forth above and applicant respectfully requests reconsideration and withdrawal of the rejection of claim 4 under 35 U.S.C. § 103(a).

Newly Added Claims

Claims 34-39 have been added to further define the invention. Support for the amendments can be found in the specification as originally filed at least at Figure 7 and in the claims as originally filed.

Conclusion

In view of the foregoing amendments and remarks, applicant respectfully submits that the present application is in condition for allowance. Reconsideration of the application and an early notice of allowance are respectfully requested. In the event that the examiner cannot allow the present application for any reason, the examiner is encouraged to contact the undersigned attorney, Raymond N. Scott Jr. at (215) 564-8951, to discuss resolution of any remaining issues.

Attached hereto is a marked-up copy of the changes made to the claims by the current amendment. The attached page is captioned "Version with Markings to Show Changes Made".

Respectfully submitted,



Raymond N. Scott Jr.
Attorney for Applicant
Registration No. 48,666

Date: May 20, 2003

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
(215) 568-3100